
Coastal Hazards Adaptation Team (CHAT) Work Session #29

Tuesday, August 17, 2021

2 PM – 4 PM

VIRTUAL MEETING

Zoom Meeting

<https://us02web.zoom.us/j/84508357533?pwd=b3VMSC9GVVpzZEwxTzdTNUhWSjdWdz09>

or Call +1 929 205 6099

Meeting ID: 845 0835 7533

Passcode: 000831

NOTES

Participants: Jay Diener, Brianna O'Brien, Jen Hale, Joe Lynch, Debra Bourbeau, Jason Bachand, Bob Ladd, Anne (Tocky) Bialobrzeski, Building Inspector Jim Marchese and Barbara Kravitz

Absent: Rayann Dionne, James Waddell, Tom Bassett, Stephen LaBranch

Staff: Liz Durfee, Kirsten Howard, and Nathalie DiGeronimo

Guest Speaker: Kevin P. Lucey, NH DES Coastal Program *"Interventions for Resilience of Salt Marsh in the Hampton Seabrook Estuary"*

Ms. Durfee began the meeting at 2:00 PM.

1. Introductions

The members introduced themselves and indicated whether they were affiliated with the Town, a group or were residents.

Liz Durfee indicated she is the planning consultant.

Joe Lynch indicated he is the Deputy Director of Public Works.

Jay Diener indicated he is with the Hampton Conservation Commission and will be also representing SHEA as Rayann Dionne is absent.

Brianna O'Brien indicated she is the Conservation Commission Coordinator.

Nathalie DiGeronimo indicated she is the Resilience Project Manager with the NH DES Coastal Program.

Jason Bachand indicated he is the Hampton Town Planner.

Barbara Kravitz indicated she is a representative of the Hampton Beach Area Commission.

Kirsten Howard indicated she is with the NH DES Coastal Program.

Bob Ladd indicated he is with the Hampton Beach Village District.

Anne (Tocky) Bialobrzkeski indicated she is representing the Zoning Board of Adjustment.

Deb Bourbeau indicated she is a resident representative.

Jen Hale is the Director of Public Works.

Jim Marchese is the Building Inspector.

2. Approve meeting notes from July, 2021

Ms. Durfee noted edits were posted electronically. Ms. Durfee clarified the paragraph concerning funding of loss claim payments for flood insurance. \$2.4 million represents the recurring loss payments. \$6.2 million represents the total payments over a 35-year history.

Ms. Hale motioned to approve the July 20, 2021 meeting minutes as amended. Ms. Bourbeau seconded the motion. A vote was taken, the motion passed 7-0-2.

3. Marsh Ditch Presentations – Kevin Lucey, NH DES Coastal Program

Mr. Lucey presented a Power Point presentation entitled *“Interventions for Resilience of Salt Marsh in the Hampton Seabrook Estuary.”*

Ms. Durfee asked Mr. Lucey for permission to record the presentation and Mr. Lucey agreed.

Mr. Lucey referenced a presentation given earlier this year on January 27, 2021 on behalf of SHEA entitled *“Salt Marsh Ditching Exploring the History, Impacts and Recovery”* with guest speakers Dr. David Burdick, Dr. Gregg Moore and UNH Associate Research Professors: Dr. Alyson Eberhardt, Coastal Ecosystems Specialist with NH Sea Grant and UNH Extension, Eric Small, President of the Seabrook Historical Society and Author in addition to himself as Habitat Coordinator for NHDES Coastal Program.

Mr. Lucey discussed the history of the salt marsh and agricultural uses which included terracing in the 1800s and other man-made impacts and the research being done to find ways to correct potential impairments in the future. Mr. Lucey posted an aerial image of the Hampton marsh area noting right angles indicative of embankments.

Mr. Lucey shared the current science concerning existing vegetation and what is believed to impact the short marsh grass versus the tall marsh grass and the potential for future impacts with inundation and higher levels of inundation associated with predicted sea level rise. Some concerns indicated the plants serve the estuary, affect functions and values in the ecosystem in many ways and without them the area might be reduced to mud flats with significant sea level rise and loss of any protections they provide the

coastal areas with water quality and storm surge. Maintaining the appropriate level of inundation, soil conditions and salinity tolerances could provide some relief.

Mr. Lucey shared a video showing experimental projects done by other communities where a method referred to as “ditch remediation” was implemented. The Trustees of Reservations in Massachusetts undertook a project in a 300 acre salt marsh, which is now underway.

“Ditch remediation” in these projects involved harvesting some marsh grasses which were then bundled together and staked in control group areas into the bottom of certain ditches. Mowing would occur on one side one year then alternate for a period of three years with the goal to bring the elevation up. The growth of the salt marsh is then measured to detect biomass and accumulation of sediment. The normal growth rate is 2.5-3 mm per year typical of this region and SLR.

Mr. Lucey discussed SLAMM which is Sea Level Affecting Marsh Models. 6.6’ of SLR may convert marshes to mud flats. With the period of gain believed to be 2025 and complete loss in 2100. Predictions show unraveling in 2075. Mr. Lucey showed photos of Rhode Island where high marsh converting to mud flats took place in only five years.

Mr. Lucey described “Runnels” or shallow drain channels and showed aerial photos of Plum Island in Newburyport being researched since 2014 at the Wildlife Refuge. Runnels have a longer zone of saturation so high marsh can survive. Restoring natural flow may buffer storm surge.

Mr. Lucey described the potential for Hampton which would be implemented with a first phase in 2023 ideally in spring. A monitoring plan would be developed. Treatments would be in 2023-2025. \$20,000 in funding from the Coastal Resiliency Grant will be used to support the plan. There is a Restore America grant application available on September 20.

Mr. Diener asked about positive effects of legacy ditching and how 50% was determined to be the optimum percentage to remediate. Mr. Lucey noted he believed it to be an arbitrary number based on density. It is critical to be not too much or too little.

Ms. Bialobrzski expressed concerns about identifying private ownership and boundary monuments. M. Lucey noted this will be a significant complication, but that they won’t do remediation if they can’t identify and get permission from a private property owner.

Ms. Howard asked about potential impacts and the benefit to homeowners such as slowing flooding, reducing impacts or causing more flooding. Mr. Lucey noted the plan is modeled with the consultant to reduce flooding effects prior to implementation. Any adverse effect seems unlikely acting against subsidence and salt marsh loss.

Ms. Durfee asked about the rate of growth exhibiting similarity to the rate of SLR and if there is historic data to compare the growth rates and how much SLR is contributing. Mr. Lucey noted 2.5% is the general rate of building. 4.0 mm per year is the rate where the marsh won’t be able to keep up. There is a lot we don’t know about tidal hydrology.

Ms. Hale noted if the grant is funded with taxpayer dollars it limits the ability of the project to cross borders and work with private property owners.

Ms. Durfee thanked Mr. Lucey for taking his time to come in and speak to the Team.

4. Relevant Flood Updates

Mr. Bachand discussed the PREPA grant received by the Town Planning Department for updates to wetlands and flood plain ordinances and meeting with the Resilience Plan and Design audit and Master Plan Steering Committee concerning options for outreach and engagement. Phase II of the Master Plan is moving forward. The Steering Committee is meeting tonight. There is a Forum open to the Public at Hampton Academy on September 29th.

Jen Hale discussed the Flood Study and Kings Highway drainage design. They are meeting next week concerning designs.

Mr. Diener reported the Conservation Commission met to recommend acceptance of the purchase of a 23-acre conservation easement off North Shore Road which has uplands and wetlands including Nilus Brook, Ice Pond and Mill Pond, connects to the wildlife corridor and other resources. The price is \$142,000 with \$80,000 contributed through Conservation funds and other grants being looked at for the additional \$62,000 needed to close by the end of the year.

Ms. DiGeronimo reported on August 9th FEMA has noticed a building resilient infrastructure grant (BRIC) application. https://www.fema.gov/sites/default/files/documents/fema_nofiscal-year-2021-building-resilient-infrastructure.pdf

5. Membership Updates

Ms. Durfee reached out to the Building Inspector, Mr. Marchese who is present for this meeting and the Police Chief/EM Director who indicated he would like to receive relevant agendas and participate as he is able. Ms. Dionne is communicating with Norma Collins to confirm her interest. SHEA will be a non-voting member. Conservation Commission will have one voting member t/b/d.

The Rules of Procedure will be finalized and going forward a quorum implemented for regular members.

6. CHAT Outreach

Mr. Durfee discussed education opportunities on Sea Level Rise (SLR) and Project Awareness which were the topics with the most interest on the outreach survey.

Ms. Durfee noted CHAT recently sent a support letter on behalf of SHEA's application for the PREPA grant, which they did not get.

Mr. Diener attends the NH Coastal Adaptation Workgroup, nhcaw.org, which is a great outreach tool for communities and for building awareness to residents and has information on the steps Hampton has taken to be more flood resilient. Ms. Durfee posted a timeline entitled *“Milestones Toward a Resilient Hampton NH.”* More information could be added included how the projects were funded and the outside resources the Town brought in.

Ms. Durfee asked if there were other outreach effort ideas.

Mr. Ladd recommended SAU 90.

Ms. Durfee noted CHAT recommendations did not focus on ditch restoration and there is not a lot of awareness. Ms. Hale noted Flood Studies & Kings Highway design were put forth by Malone & McBroom, the Town’s Phase I Consultants to the Master Plan Coastal Chapter update.

Ms. Durfee asked if a video could be put together and posted on Hampton and/or SHEA’s website to tell the story of why the project occurred and the outcomes. Mr. Diener passed along a Youtube video link made by North Hampton which the Team viewed entitled *“Climate Ready North Hampton & Little Boar’s Head.”*

Mr. Ladd noted it was well done and not presented over people’s heads. Ms. Bourbeau commented that it was visually helpful. Ms. Durfee noted a video could be helpful to present at a meeting prior to discussion. The recommendations table could be in a more user-friendly format with more background information. A one-page document could be put together to focus on one or two recommendations.

Mr. Bachand noted Steve Whitman is airing on Channel 22 now on the Master Plan website later this week.

Mr. Diener proposed a monthly newsletter.

Ms. O’Brien noted that an in-person workshop would foster discussion and enhance understanding, and agrees the SAU could be helpful. A class with the topic in their curriculum could be chosen, do projects and collaborate.

Ms. Ladd asked if High School students are required to contribute volunteer time to graduate. There could be a school-wide video presentation.

Ms. Durfee recommended formulating an outline to approach outreach target audiences. Ms. DiGeronimo added identifying who CHAT is trying to reach and what the message is to tell different people and work backwards finding the best way to communicate.

7. Coastal Resilience Staff Position (if time)

Ms. Durfee will put the Staff Position discussion on the agenda for the next meeting as the first priority.

8. Rules of Procedure – brief review of additional CHAT member comments (if time)

9. Next meeting: September 21, 2021

10. Adjourn

The meeting adjourned at 3:55 PM.

Respectfully submitted,

Nancy Hoijer, Recording Secretary